Circular & Fair ICT Pact

Leveraging Environmental Product Declarations to Improve Scope 3 Emissions Reporting in ICT Procurement

(version 1.0, January 2026)

CFIT Recommendation

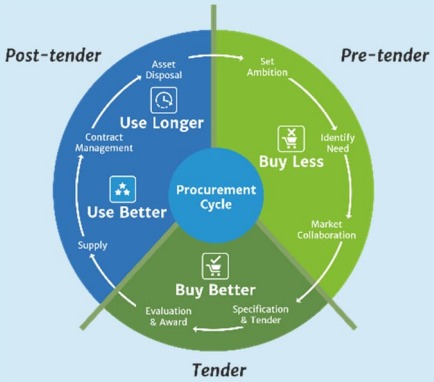
Product scope: All hardware

Level 2: Advanced

Procurement cycle: Buy better

CFIT Recommendations

The Circular and Fair ICT (CFIT) Pact is a procurement-led initiative to accelerate circularity, fairness, and sustainability in the ICT sector. It promotes common procurement practices, provides guidance, and facilitates knowledge sharing. CFIT Recommendations, developed by and for participants, outline these practices with explanations and practical implementation guidance for all phases of the procurement cycle (figure right). Participants commit to implementing the recommendations or to explaining why they cannot. Developed by experts in sustainable public procurement (SPP) of ICT, the recommendations are practical and implementation-focused. CFIT participants also encourage other public organizations to implement them. More information: circularandfairictpact.com.



1 Introduction

The Circular and Fair ICT (CFIT) Pact is a procurement-led initiative that aims to accelerate circularity, fairness and sustainability in the Information & Communications Technology (ICT) sector. One of the ICT sector's impacts is its contribution to global carbon emissions. (Public) entities procuring ICT, who participate in CFIT would therefore like to better understand the carbon impacts of the products they buy. This information enables organizations procuring ICT to make informed decisions to reduce the carbon impacts of their ICT landscape, in the various phases of the procurement cycle.

According to the World Bank, the ICT sector is responsible for approximately 1.4% to 4% of global GHG emissions. In 2020, the ICT sector's emissions were estimated between 0.8 and 2.3 gigatonnes of CO_2 equivalent ($GtCO_2e$). That is as much as about 500 million conventional fuel cars or the annual emissions from around 600 coal fired power stations. By 2040 projections indicate that the ICT footprint could reach 14% - with datacentres contributing almost half of this growth.[1] The entire industry must reduce carbon emissions by 45% in the next ten years to meet the goals of the Paris Climate Agreement. This makes the procurement of ICT in the public sector a highly significant target for reducing carbon impact and addressing the climate emergency.[2]

[1] CI&T | Climate crisis and the technology sector

[2] UNEP | The Climate Emergency

2 Why this recommendation?

This CFIT Recommendation gives more information on Environmental Product Declarations (EPDs) and how (public) organisations procuring ICT can leverage specific product-based information within EPDs to improve their scope 3 emissions calculation and reporting data for ICT equipment.

CFIT therefore recommends procuring organisations to require suppliers to provide third-party verified EPDs for all ICT hardware supplied.

Please note: The scope of recommendation does not include the use of EPDs as a comparative tool in carbon performance of products at the evaluation stage of procurement exercises due to the different methodological approaches used in production of EPDs (see Section 4 Next Steps).

2.1 Current overview on Scope 3 Emissions

Scope 3 emissions occur in the value chain of a reporting organisation - across both upstream and downstream emissions - and are notoriously difficult to measure. Unlike Scope 1 (direct emissions) and Scope 2 (indirect emissions from purchased energy), Scope 3 emissions are largely outside an organisation's direct control. However, they include procurement (and waste from procurement) which is within the direct control of the organisation. Procurement is consistently the largest contributor to Scope 3 emissions and Scope 3 emissions typically represent the largest share of an organisation's carbon footprint, particularly in the public sector, and in significant spend areas, such as ICT. In fact, initial analysis from Canada estimates the annual Scope 3 emissions from the purchase of ICT could be up to 15,000 times more than the emissions from the ICT's use (scope 2 emissions).

Accurately accounting for Scope 3 emissions is essential for organisations aiming to understand and reduce their total environmental impact. Without reliable data on these emissions, sustainability strategies risk being incomplete or misleading.

2.2 Accounting methodologies and issues

There are a number of calculation methodologies for Scope 3 emissions and the most basic method - the spend-based approach – is simple and based on an organisation's procurement spend data. The spend-based method is useful in getting organisations to consider the impact of their purchasing decisions and in identifying high spend and potentially high carbon spend areas. However, this approach has significant drawbacks. For example, if procurers switch to lower carbon options that may have an initial capital premium, then the carbon emissions appear to increase rather than decrease.

More robust calculation methods are available:

- Average Product Data: based on average product data (using average emission factors from available databases) and multiplied by purchasing activity (e.g. volume of ICT devices).
- Supplier-Specific Method: using actual emissions data reported by suppliers, e.g. through third-party verified Environmental Product Declarations (EPDs).

Depending on the supply chain and spend area, a further Hybrid Method combines average product data and supplier-specific data (where available).[3]

CFIT Participants prefer the supplier-specific method through EPDs, as it more precisely informs decisions along the CFIT procurement cycle to reduce impacts and drive improvements in the supply chain.

2.3 Introduction to Environmental Product Declarations (EPDs)

Environmental Product Declarations (EPDs) are standardized documents, produced by the manufacturer, that provide transparent, verified data about the environmental impact of products throughout their life cycle. Developed in accordance with international standards such as ISO 14025 and EN 15804, EPDs are based on Life Cycle Assessments (LCAs) and are independently verified to ensure credibility.

EPDs typically include environmental information, including greenhouse gas emissions in terms of Global Warming Potential (GWP), expressed as CO_2 equivalents (CO_2e) on all stages of a product life cycle, including:

- Raw material extraction
- Manufacturing processes
- Transportation
- Use phase
- End-of-life disposal

2.4 How EPDs can Help and the Challenges

In the context of ICT hardware procurement, EPDs offer a practical solution for quantifying Scope 3 emissions. By requiring manufacturers to provide EPDs for their products, organisations can obtain consistent, third-party verified data on the environmental impact of the devices they purchase. This enables more accurate emissions reporting and supports informed decision-making in procurement processes.

However, some challenges remain:

- Methodological Variability: Not all manufacturers use the same assumptions or system boundaries in their LCAs, which could lead to inconsistencies in EPDs.
- Data Gaps: Some product categories or manufacturers may not yet offer EPDs, limiting coverage.

[3] Further detailed information on calculation methods can be found in the Greenhouse Gas Protocol Technical Guidance for Calculating Scope 3 Emissions guidance.

- Comparability: Even with standardization, comparing EPDs across different brands or models can be complex due to variations in reporting formats and metrics.

Despite these challenges, using data from EPDs would significantly improve the robustness of current calculations beyond the spend-based method many procuring organisations currently use even when not (yet) allow for differentiation between different manufacturers in a tendering process.

2.5 CFIT Recommendation

CFIT recognises the important role of EPDs in advancing sustainable procurement practices and therefore recommends the following:

All relevant tenders issued by procuring organisations should require suppliers to provide third-party verified EPDs for all ICT hardware supplied.

This requirement will help to:

- Allow CFIT participants to use the carbon data within EPDs to improve the quality of carbon data used in monitoring and reporting their organisation's progress towards reduction of carbon and wider environmental impacts.
- Encourage manufacturers to develop and disclose EPDs where these are not already publicly available.
- Improve the availability and quality of Scope 3 emissions data.
- Drive market transformation toward greater transparency and accountability.
- Drive continuous improvement in CFIT participant's value chains.

3 How to incorporate this recommendation

The recommendation for the provision of EPDs by suppliers should be made at the tender stage by relevant procurement officers within the procuring entity. Verification of EPDs should continue into the contract management stage of the procurement cycle.

4 Next Steps

To support this recommendation and transition, CFIT has identified the following actions:

1. Tender stage: CFIT to work with participants to develop model tender criteria and/or contract clauses that support CFIT participants with incorporating EPD requirements in tenders and contracts.
2. Standardize Reporting Requirements: Develop a unified framework for EPD submission in tenders, specifying required data points and preferred formats.
3. Promote Consistency and Comparability: Engage and work with industry groups (e.g. PAIA) and CFIT participants and supporting organisations to reduce incompatibilities between existing EPD calculation methods.

4. Monitor and Evaluate: Work with industry groups and CFIT participants and supporting organisations to establish mechanisms to track compliance, assess data quality, estimate and report emissions, and refine requirements over time.

By embedding EPDs into procurement practices, CFIT and its participants can take a significant step toward more sustainable ICT operations and more accurate Scope 3 emissions accounting.

The Circular and Fair ICT (CFIT) Pact is a government-driven, procurement-led international partnership advancing circularity, fairness, and sustainability in the ICT sector. It brings together public organizations that coordinate and procure ICT within their countries or regions, alongside supporting organizations that provide expertise, tools, and guidance. Through CFIT, participants share knowledge, align and harmonize criteria and guidelines, develop practical tools, and engage with the market to drive more sustainable ICT practices. CFIT is an action under the Sustainable Public Procurement (SPP) Programme of the United Nations Environment Programme (UNEP) One Planet Network.

More information: circularandfairictpact.com or contact us: CFIT@rws.nl